NOTE XXXVIII.

ON EXOTIC DIPTERA.

BY

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Part 1.

The Leyden Museum has from time to time been enriched with small collections of exotic Diptera, which have neither been arranged nor determinated. In looking over these objects, I observed a great many very interesting species among them, and a more accurate examination told me, that a considerable number of them are unknown to science. In the present notes I intend to give descriptions of these new species, together with some observations on other species already described.

This first part will treat of the Diptera belonging to the old tribe Nemocera.

Family ***Culicidae.***

1. *Anopheles barbirostris*, n. sp.

Fuscus; thorace sublineato; haustello palpisque hirsutis; pedibus testaceis; halteribus fuscis; alarum costa fusca, punctis duobus niveis. — ♀. Long. 5 mm.

Dark brown. Rostrum and palpi longer than the head and thorax taken together, both clothed with brown scaly hairs; the joints of the palpi hardly distinguishable. Thorax rather long and narrow, somewhat lighter coloured than the head and abdomen, quadrangularly truncated in front, with indistinct longitudinal stripes on the upper part. Abdomen with pale incisions. Legs very long and slender, testaceous; femora a little enlarged towards the end, when viewed in some directions whitish at the tip. Halteres piceous. Veins of the wings with brown scales, which are accumulated towards the costa; a point of snow-white scales at two thirds of the costa and a similar point near the tip; the two furcate cells of equal length.

A female from Mount Ardjoeno: East Java (Hekmeyer).

The straight, projecting, hairy palpi and rostrum give this species a peculiar aspect, differing from that of our indigenous species of the genus.

2. *Anopheles annularis*, n. sp.

Fuscus; thorace lineato; haustello nudo, nigro; palpis brunneis, albo-annulatis; pedibus testaceis, tarsis albo-annulatis; alarum costa niveo-maculata. — ♀. Long. 4,5 mm.

Blackish; thorax with a dark bluish-grey dust and five longitudinal fuscous lines; pleurae light grey with black spots, arranged in longitudinal rows. Antennae with light-brown hairs; rostrum black; palpi fuscous, as long as the rostrum; the base of the first and second joints and the whole apical joint white; the two first joints covered with a dense, short, dark pilosity. Legs long and slender, testaceous; anterior tarsi with a white ring on each joint; the long hind tarsi fuscous in the middle and with a white ring, wholly white towards the end. Veins of the wings with fuscous and white sales; the costa alternately spotted with dark brown and white.

A female from Mount Ardjoeno: East Java (Hekmeyer).

This species may perhaps be identical with *A. sinensis* Wied. (Auss. Zweifl. I. p. 547).

Fam. ***Chironomidae.***

3. *Tanypus Crux*, Wied.

T. Crux, Wied. Anal. entom. 10; id., Auss. Zweifl. I. 19. 2; — *T. pardalis*, Dol. Nat. Tijdschr. Ned. Ind. X. 405. pl. 6, f. 1; — *T. ornatus*, Dol. ib. XIV. 385. pl. 7, f. 1.

A male from Mount Ardjoeno: East Java (Hekmeyer). The antennal plume is yellow with a brown tip. The two species of Doleschall quoted above must be regarded as synonyms of *T. Crux.* Doleschall describes *T. pardalis* as having dark legs and unspotted wings, and *T. ornatus* as having a black scutellum; but the characteristic markings on the thorax and the brown tipped antennal plume are distinctly visible in his figures of the two species. In fact, in that of *T. pardalis*, the legs are not very dark, and what Doleschall calls the black scutellum is perhaps the black spotted metanotum, against which the narrow and pale scutellum hardly appears, but yet is more or less visible in the figure. As to the markings of the wings, in the specimen before me, they are not very clear, which may also have been the case with the specimens of Doleschall so as to have led him to declare the wings unspotted.

With some doubt I refer to the same species a ♀ received from the same source as the above mentioned ♂. The markings on the thorax are quite similar, but otherwise the female differs in many respects. It is a little smaller (2,5 mm.); the abdomen is wholly black and the dark markings of the posterior legs are much more extended, the hind femora are almost wholly fuscous; the wings are more darkly clouded; in the middle the costa is brown, emitting two half bands of the same colour, the first reaching over the middle crossvein, the other at the end of the subcostal vein.

Fam. ***Bibionidae.***

4. *Bibio rubicundus*, n. sp.

Rufus; puncto ocellari fusco; rostro, palpis, antennis (?), tibiis tarsisque nigris; alis flavescentibus. — ♀. Long 8 mm.

Reddish yellow, except the rostrum, palpi, basal joints of the antennae, and the tibiae and tarsi, which are black; most probably the flagellum of the antennae is black also, but I am not quite sure of this as it is wanting in the single specimen before me. The head is very shining and the thorax also, though in a less degree; on the vertex a brown ocelloid spot is present. The wings have a greyish-yellow tinge, towards the anterior margin inclining to reddish-yellow; the veins agree in colour with that of the surface.

A female from Java (S. Müller).

This species corresponds almost completely to the description of *B. obediens* Ost. Sack. (Ann. Mus. Gen. XVI. 395) which, however, differs in having the wings brownish, and darker along the anterior margin.

5. *Plecia tristis*, n. sp.

Nigricans; thorace cano, vittis tribus nigris; antennis pedibusque piceis; alis laete fuscis — ♀. Long. 4 mm.

Differs from all the East-Indian species in its small size and the total absence of red colour. Head black; the vertex conically elevated. Antennae piceous, a little longer than the head, covered with short pubescence; the joints closely connected together, the apical ones somewhat thicker. Thorax light-grey, with three black, shining, longitudinal bands, which in the middle are joined together; the central band shortened behind, the lateral ones shortened in front. Abdomen shining black. Legs piceous, with short pilosity; femora slender at the base, thickened towards the end. Halteres blackish, with a rather long stem. Wings brownish; their neuration agreeing with that of *Pl. fulvicollis.*

A female from Mount Ardjoeno: East-Java (Hekmeyer).

Fam. ***Tipulidae.***

Of this very extensive family the Leyden Museum has received several exotic forms, for the most part of large size. The minute ones, which undoubtedly are innumerable in the tropical regions, are almost wholly neglected. The species of the genus *Ctenophora*, especially, are not rare in collections, which come to us from the East-Indies. Including the three new species, which will be described hereafter, there are at present, as far as I know, no less than sixteen described species in this genus. In order to facilitate the determination of these species, I have composed the following dichotomous table, which must be considered as a first attempt, as I had but limited materials at my disposal, and hence was obliged to insert most of the species merely according to the descriptions.

Gen. *Ctenophora.*

1.	Tibiae, at least the hind ones, with a pale coloured ring at the base	2.
	Tibiae without this ring	11.
2.	Wings yellow with a brown tip	3.
	Wings brown or blackish, either unicolorous or with light spots	5.
3.	The hind tibiae with a pale ring	*ardens*, Wied.
	All the tibiae with a pale ring	4.
4.	Hind tibiae straight	*compedita*, Wied.
	Hind tibiae strongly curved.	*curvipes*, n. sp.
5.	Body reddish-yellow with black markings	6.
	Body velvety black with yellow markings	9.
6.	Wings with a light longitudinal band in the middle	7.

Wings with several light spots 8.
7. Femora black with yellow base . . *javanica*, Dol.
Femora yellow, black towards the tip . . . . *gaudens*, Wied.
8. Abdomen uniform reddish yellow . *laeta*, Fabr.
Abdomen with the anterior margin of each segment black . . *Taprobanes*, Walk.
9. Wings uniform black or blackish . *dolens*, Ost. Sack.
Wings brown with a white spot in the middle . . . . 10.
10. Scutellum black . . . . *suspirans*, Ost. Sack.
Scutellum yellow . . . . *idalia*, Ost. Sack.
11. Wings yellow, blackish or infuscated at the tip and more or less at the posterior margin 12.
Wings dark brown, sometimes the cells lighter in the centre 13.
12. Legs reddish-yellow, the tips of the hind femora and the hind tarsi black . . . . . . *melanura*, Walk.
Legs black, the femora (except their tips) reddish-yellow. . . *chrysopila*, Walk.
13. Head rufous . . . . *incunctans*, Walk.
Head black . . . . 14.
14. Abdomen wholly black (thorax ferruginous above only) . . . *velutina*, n. sp.
Abdomen yellow at the base or with a yellow ring. . 15.
15. Thorax ferruginous with broad brownish-red longitudinal bands . . . . *xanthomelaena*, Walk.
Thorax uniformly black. . . . *annulosa*, n. sp.

6. *Ctenophora compedita*, Wied.

Wied. Dipt. ex. I. 21. 3; id. Auss. Zweifl. I. 39. 4; v. d. Wulp, Tijdschr. v. Entom. XXIII. 156. 2. pl. 10, f. 1.

The descriptions quoted refer to the ♀. I consider as belonging to this species three male specimens from Haroeka (Hoedt), Celebes (v. Rosenberg) and Aru? (v. Rosenberg). They are bright ferruginous; the black markings of the thorax are wanting and on the abdomen there is but a small black spot on the 5th and 6th segment (in the specimen from Celebes only on the 6th); the upper part of the genitals is also black or fuscous Antennae a little longer than the head and thorax, reddish-yellow; the third joint with a brown tooth on the underside; each of the following joints with four long, black and hairy appendages, which are arranged in two pairs and directed downwards; in consequence of which the antennae have a very plumose appearance. Legs reddish-yellow; femora with a black tip; tibiae brown, towards the base with a pale yellow ring, black at the tip; the last four joints of the tarsi blackish. Halteres reddish-yellow. Wings perfectly agreeing with my figure quoted above.

7. *Ctenophora curvipes*, n. sp.

Testacea; abdominis segmentis ultimis in dorso nigro-maculatis; femoribus rufis apice nigro; tibiis tarsisque nigris; tibiarum basi albo-annulata; tibiis posticis arcuatis; alis flavescentibus, apice nigricante. — ♀. Long. 16,5 mm. (cum oviducto).

Closely allied to *Ct. compedita.* Uniformly testaceous or dusky ferruginous, including the antennae and palpi; a black dorsal spot on the 5th, 6th and 7th segments of the abdomen; ovipositor as long as these three segments, shining black, with the apex slender, pointed, and reddish-yellow. Antennae hardly longer than the head; the third joint longer than the two basal joints together cylindrical and without a tooth; the fourth joint oblong-oval; the following ones round; the apical joint subulate. Femora yellowish red, with black tips and a dense, decumbent yellow pilosity; tibiae and tarsi black, the former with a white ring near the base; hind tibiae arcuate. Halteres ferruginous. Wings with a fulvous tinge, the apical fourth blackish; veins in colour agreeing with that of the surface.

A ♀ from Gorontalo (v. Rosenberg).

8. *Ctenophora javanica*, Dol.

Dol. Nat. Tijdschr. v. Ned. Ind. X. 406. 7. pl. IX. f. 1; v. d. Wulp, Tijdschr. v. Ent. XXIII. 156. 3. pl. 10, f. 2.

Two female specimens from Ardjoeno in Java (Hekmeyer), agreeing with the description which I have given in the „Tijdschrift voor Entomologie", except that the base of the wings is more yellowish.

In this species the joints of the antennal flagellum (♀) are a little dilated towards the underside, in consequence of which the antennae seem to be a little serrulated.

9. *Ctenophora incunctans*, Walk.

Walk. Proc. Linn. Soc. Lond. IV. 93. 9.

I refer to this species a ♂ from Sangir (v. Rosenberg) and a somewhat defective ♀ from Tondano (Forsten). The ♂ agrees with the short description of Walker, the ♀ with his var. *β*. With regard to the female, which has only the upperside of the thorax ferruginous and which he describes as the normal form, I consider it as a different species (see n°. 10 hereafter). A more ample description of *Ct. incunctans* will not be regarded as superfluous.

♂. Long. 12 mm. — Head and thorax ferruginous, opaque; with some indications of obscure longitudinal bands on the thorax. Antennae as long as the head and thorax together; the two basal joints ferruginous; the third joint fuscous, cylindrical, with a rather long tooth on the underside at the end; the following joints blackish, each with four long, black appendages which are covered with short hairs and arranged in two pairs. Palpi reddish-yellow. Abdomen at the base a little narrowed, reddish-yellow; the hind border of the second segment and all the following segments black; anus but slightly thicker; genitals ferruginous at the end, with a pair of small scaly black lamellae at the bottom. Legs black, except the coxae and the base of the femora, which are reddish-yellow. Halteres fuscous; base of the stem rufous. Wings broad, fuscous, with a clear stripe in the two upper basal cells; second posterior (furcated) cell sessile.

♀. Long. 18 mm. — In coloration agreeing with the ♂, except that the rufous base of the femora is more extended, on the front femora nearly to the tip; on the contrary the abdomen is almost entirely black, and besides the above mentioned clear stripes in the wings, all the cells along the posterior margin have light centres. The antennae are wanting in the described specimen.

10. *Ctenophora velutina*, n. sp.

Atra velutina; thoracis disco ferrugineo; antennis pedibus halteribusque nigris; palpis fuscis; alis latis, nigro-fuscis. — ♀. Long. 19 mm.

Syn. *Ct. incunctans* Walk. Proc. Linn. Soc. Lond. IV. 93. 9. ♀ (excl. var. *β*).

Resembles the ♀ of the foregoing species. Entirely velvety black; only the disk of the thorax ferruginous and a small rufous band on the front, behind the insertion of the antennae. Antennae black, a little longer than the head; the joints, beginning with the third, round, hardly dilated towards the underside. Palpi fuscous. Ovipositor shining black. Legs and halteres black. Wings dark fuscous, with a small, light, longitudinal stripe in the upper basal cells; the wings are broad, with the costa slightly bent outwards; furcated cell sessile.

A ♀ from Celebes (v. Rosenberg).

(*To be continued.*)